ABSTRACT

A system, method, and computer program product for rendering gaseous volumetric objects scenes using an alpha channel. In one described implementation, the method determines a distance between a user to boundaries of a gaseous volume and then stores the distance in an alpha channel to arrive at an alpha value. Then the alpha value can be used as a factor assist in blending scene colors with gaseous colors to render virtually realistic pixels for the gaseous object from the perspective of a user's view of the object. The resulting scenes can then be used to simulate patchy fog, clouds, or other gases of more or less constant density and color.